REMARKS

Claims 1, 17 and 23 have been amended. Claim 19 has been canceled. Thus, claims 1, 3-5, 7, 8, 12-18 and 20-23 are now pending in the present application. Support for the amendment to claims 1 and 17 may be found in the specification at page 14, lines 8-11 and in canceled claim 19. Support for the amendment to claim 23 may be found in the specification at page 16, lines 2-6. Thus, no new matter has been added. Reconsideration and withdrawal of the present rejections in view of the comments presented herein are respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 1, 3-5, 7, 12-20 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fujishima et al. (US 6,239,231), and Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujishima et al. (US 6,239,231) in view of Nishimura et al. (US 2002/0009667).

The Office Action alleges that it would have been obvious to obtain a resin comprising units (a1), (a2), (a3), and (a4) as recited in the present claims, based on Fujishima's teaching about the units (I), (II) and (III) that may form the resin and the teaching that other acid-cleavable units (I) may be used in combination with other acid-cleavable units. The Office Action also contends that it would have been obvious to use a combination of resins as taught by Nishimura et al. in the chemically amplified resist of Fujishima et al. with a reasonable expectation of success. However, as explained below, neither combination of references would render the presently claimed invention obvious.

Claims 1 and 17 as amended recite that said structural unit (a4) accounts for 5 to 50 mol% to all the structural units that constitute said component (A). As discussed in the present specification at page 14, lines 11-15, by ensuring that the amount (mol %) of the structural unit (a4) is at least as 5 mol%, the improvement in LER (line edge roughness) is particularly favorable, whereas if the quantity does not exceed 50 mol%, then a deterioration in the resist pattern shape can be prevented. Moreover, the positive resist composition recited in the present claims results in reduction of the proximity effect without reducing the depth of focus as discussed at page 27, first paragraph.

To increase the depth of focus, it is necessary to develop a resist composition in the region where the irradiating light is weakened due to out of focus. In other words, a resist which

is sensitive to the light is required. However, when a structural unit which is sensitive to the light is simply used, the proximity effect can not be reduced because the I/D dimensional difference increases by directly reflecting the difference in the amount of the light. This is because there is a difference in the amount of the light which has passed through the mask between the dense pattern and the Iso pattern. As demonstrated by the Examples in the present specification, the resist composition comprising structural units (a1), (a2), (a3) and (a4) enables the proximity effect to be reduced without reducing the depth of focus.

These unexpected results are not disclosed or suggested by the cited references, and could not have been predicted based these references. Thus, the unexpected results would effectively rebut any *prima facie* showing of obviousness raised against Claims 1, 3-5, 7, 12-20 and 22.

Claims 21 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fujishima et al. (US 6,239,231) in view of Hada et al. (WO 03/048863, with citations from US 2004/0058269).

As discussed above, claim 17 is not obvious over Fujishima et al. The unexpected results discussed above could also not have been predicted based on Hada et al., either alone or in combination with Fujishima et al. Thus, claim 17 is also not obvious over Fujishima et al. in view of Hada et al. Since claim 21 depends on claim 17 which is nonobvious, then claim 21 is necessarily nonobvious.

Claim 23 recites that said structural unit (a5) accounts for 1 to 30 mol% to all the structural units that constitute said component (A). By ensuring that the amount of structural unit (a5) is in this range, the positive resist composition recited in present claim 23 exhibits superior resolution for isolated patterns through to semi-dense patterns, which is desirable These unexpected results are not disclosed or suggested by the cited references, and could not have been predicted based these references. Thus, the unexpected results would effectively rebut any *prima facie* showing of obviousness raised against Claim 23.

Neither Fujishima et al. nor Hada et al. teach or suggest the ability of the resist composition recited in present claim 23 to enable the proximity effect to be reduced without reducing the depth of focus. As discussed above, the use of light sensitive resins can increase depth of focus but ordinarily prevents a reduction in proximity effect. As demonstrated by the Examples in the present specification, the resist composition comprising structural units (a1),

(a2), (a3) and (a5), as recited in Claim 23, unexpectedly enables the proximity effect to be reduced without reducing the depth of focus. Thus, Claim 23 is patentable over the cited references for the same reasons discussed above in connection with Claim 17.

In view of the comments presented above, Applicants respectfully request reconsideration and withdrawal of all of the rejections under 35 U.S.C. § 103(a).

CONCLUSION

Applicants submit that all claims are in condition for allowance. Should there be any questions concerning this application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Respectfully submitted,

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Dated: 2/25/09

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